RAJYA SABHA

Tuesday, the 15th November, 1988/24th Kartika, 1910 (Saka)

The House met at eleven of the clock, Mr. Chairman in the Chair.

ORAL ANSWERS TO QUESTIONS

MR. CHAIRMAN: Now, Question No. 61.

61. [*The questioner (Dr. Yelamanchili Sivaji) was absent. For answer, vide col.* 29-30 intra]

MR. CHAIRMAN: Question No. 62. Mr. Bir Bhadra Pratap Singh.

Supply of cobalt sources by BARC

*62 SHRI BIR BHADRA PRATAP SINGH: Will the PRIME MINISTER be pleased to state:

(a) whether it is a fact that BARC is also supplying cobalt sources for tele-therapy units installed in various hospitals in the country, and if so, what steps are being taken by Government to ensure that there is minimum movement of these radioactive sources between BARC nad the hospitals; and

(b) if so, whether Government propose to ensure that BARC experts themselves carry the cobalt sources in fool-proof containers for loading them on teletherapy units at various hospital sites instead of allowing the hospitals to transport parts of their tele-therapy units to BARC office in Bombay, for cobalt source loading and carry the radioactive loaded machines back to their sites?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) and (b) A Statement is laid on the Table of the House

Statement

(a) and (b) Yes, Sir. BARC supplies replacement of Cobalt-60 sources for installation in the teletherapy units at various hospitals in the country. These replacement sources are being supplied in approved transport containers which are transported by road to the hospital sites by the local agents of the teletherapy units under transport conditions stipulated by the Division of Radiological Protection, BARC as per national and international standards. The replacement sources are exchanged with the decayed sources in the teletherapy units at the hospital sites by trained and approved staff, under the supervision of the personnel from the Division of Radiological Protection, BARC as per national and international ted by road to BARC, Bombay for disposal in a manner similar to the one adopted for the supply of the replacement sources. Adequate safety protections are taken at various stages of the operation which are supervised by the Division of Radiological Protection, BARC. The movement of radioactive sources is kept to the essential minimum. In view of the adequate safety precautions prescribed, it is not necessary for BARC experts to be present during actual transportation.

SHRI BIR BHADRA PRATAP SINGH: Mr. Chairman, Sir, I have seen the statement. Out of the 150 Cobalt Radiotherapy Units in India, 40 had been established in the name of indigenisation by the same multinational subsidiary and they have only called it as the Indian Subsidiary Company, ISC. Now, in the name of indigenisation, 40 units have been established in India and they have remained inoperational. I want to warn the honourable Minister that these 40 units are forty Chernobyls or forty atom bombs lying in these inoperational units in India That is the greatest danger to which I want to attract his attention. So I would like to know whether it is not a fact that if in the name of indigenisation forty units are lying in the hospitals, then these radioactive materials are already available there. They can expose to danger the population around and inside the hospitals any moment. Before a Chernobyl is created in India by these 40 units, may I know from the honourable Minister what precautions he is taking to defuse these 40 units safely?

Now, the (b) part of my question: A large amount, Rs. 10 crores, has been

spent. May I know what action has been taken or is proposed to be taken against this Company which supplied the units in the name of indigenisation and the Government officer who colluded with the Company and gave the fitness certificates for these machines?

SHRI K. R. NARAYANAN: Sir, these cobalt units are not indigenously manufactured. The units themselves have been manufactured abroad and imported. We do make the cobalt sources at the Atomic Energy Establishment in Bombay. We have a programme for indigenisation some companies have shown interest in manufacturing these units and we are encouraging them. But we have not yet manufactured the unit so far. Therefore, it has nothing which has to do with indigenisation in this. What is indigenous is really the cobalt source. The units which are out of order, all these units, are put in very strong containers, in steel boxes, and there is no danger of any radioactivity being released from them. Any units which may be lying inoperational at the moment will be put right earliest possible and I can assure the House that there is absolutely no danger of radiation leaking out. As a matter of fact, there has not been any such incident so far in regard to cobalt units.

SHRI BIR BHADRA PRATAP SINGH: Sir, the system at present, as stated in the reply, is that these units are taken to Bombay in the Bhabha Atomic Research Centre, and they are filled in there and brought back. May I give him one instance? Is it true that a truck of an Indian subsidiary of American multi-national, General Electric Co., which was carrying radio-active source from a Gwalior hospital recently fell into a khud, causing a great hazard of exposure of radio-activity to the people *en route?* I am giving a concrete example. If so, what are the details of action taken against that company and what measures have been taken to see that such a mishap does not take place in future?

SHRI K. R. NARAYANAN: There has been just one incident which was not of leakage of radio-activity. A Gwalior hospital, a cancer hospital, had imported one of these units, and in transit, about 50 kilometres from a place called Dhule in Maharashtra, the truck skidded and the crates fell down on the road. But these crates were well secured so that there was absolutely no leakage or damage at all. As soon as the accident took place, the BARC was informed and they sent their specialists. They checked the crate as well as the surroundings if there was any radio-activity at all, and they found that there was absolutely no radio-activity at all. In fact, the crates in which the radium source was placed was completely safe and undamaged.

We have laid down a procedure, Sir, for the transportation of this source from BARC to the hospitals concerned. First of all, the container is checked by the Atomic Energy specialists. In fact, it is closed in their presence. They have also laid down very strict instructions which are given to the hospitals as well as the carrier agencies how to deal with it and even the route is specified so that if anything happens we know where it happened. Finally, when it reaches the hospital, the specialists from BARC will be there to fix it into the unit. So all precautions are taken.

In this case, unfortunately, the hospital concerned did not use the services of the specified agencies. They used another service. We are in future taking strict measures so that the approved agencies are only used, and it would be mandatory for the hospitals to use approved agencies.

SHRI SANTOSH BAGRODIA: I would like to know from the hon. Minister how the source is disposed of, and also, what are the mandatory safeguards to isolate the tele-therapy units from other departments in the hospitals?

SHRI K. R. NARAYANAN: The Cobalt sources are returned to the BARC. They are returned in the same manner in boxes which are again closed in the presence of specialists from BARC. And when they are given to the BARC they are contained in steel boxes and then buried deep down for final disposal.

SHRI VISHWA BANDHU GUPTA: I would like to know from the hon. Minister, what system of monitoring is being used to check whether somebody has received an over-dose of radiation, and also in the case of trucks was there a warning sign on the traffic itself to warn people in the rural areas where they have no knowledge of this kind of thing as to stay away from which distance mark, so, that people in the rural areas do not actually approach any danger site when it comes? I would also like to know whether the workers in those areas are being fully trained about radiation and how to inform persons and take treatment in case they have any symptoms of over-radiation.

SHRI K. R. NARAYANAN: As regards the general education for the people, it is an overall question in which we are interested. We have been spreading awareness among the people with regard to radiation. But I am not sure if there was any warning light on the truck itself. This truck was not from an authorised agency and, therefore, I presume that such warning lights were not present in that particular truck. As I said, in future we have insisted that every hospital should make use o fthe trucks belonging to these agencies which have been approved by the Atomic Energy Establishments. With regard to overdoses, I am afraid that this is a medical question and I require notice to get the answer for it.

SHRI BHAGATRAM MANHAR: Mr. Chairman, Sir, I would like to know whether these cobalt isotopes, by changing their mineral numbers, can be put to various uses in different fields such as agriculture, energy, industry and health. I would also like to know what sound system of loading these units which have radioactive sources is adopted in this country and what is the comparative system in other countries of the world.

SHRI K. R. NARAYANAN: In India, we are using internationally accepted standards for the loading of cobalt source into the unit. As regards the method of safety, we have published very clear instructions which are distributed to various agencies and hospitals indicating as to how to deal with it. I have various published materials here. These are given to the hospitals and the agencies. They show as to how to deal with the material. These publications give information as to where they can telephone in order to get immediate assistance of atomic energy specialists.

SHRI BHAGATRAM MANHAR: Sir, my question has not been answered. I have asked a specific question. I wanted to know whether, by changing the mineral numbers, these isotopes can be used in different fields such as agriculture, industry and health.

SHRI K. R. NARAYANAN: I don't understand. Sir, these isotopes are used for various purposes, for medical purposes, for industrial purposes; for agricultural purposes, etc. There are different types of isotopes. This is only one isotope. Here we are talking about isotope cobalt 60 which is used specifically for medical purposes, for cancer treatment.

MR. CHAIRMAN: He wants to know whether it can be used for agricultural purposes.

SHRI K. R. NARAYANAN: I don't think it can be used for agricultural purposes. There are different isotopes which can be used for agricultural or industrial purposes.

63. [*The questioner (Shri Harvendra Singh Hanspal) was absent. For answer, vide col 30 infra*]

Deaths due to encephalitis in the Northern States

*64. SHRI MUKHTIAR SINGH MALIK.
SHRIMATI RENUKA CHOWDHURY:†

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether a large number of persons have died due to Encephalitis disease

†The question was actually asked on the floor of the House by Shrimati Renuka Chowdhury.